What is claimed is

1. A protein having the following characteristics

(a) Molecular weight : about 47 kDa on SDS-PAGE,

(b) Optimal pH : pH 3.5 - pH 4.5,

(c) Optimal temperature : 45℃ - 55℃,

(d) Substrate specificity : phytate, p-nitrophenyl phosphate, tetrasodium pyrophosphate, ATP or ADP,

(e) Michaelis constant of 0.3 - 0.5 mM utilizing phytate as a substrate,

(f) High resistance to protease such as pepsin, trypsin, papain, elastase or pancreatin.

2. The protein as set forth in claim 1, wherein the protein contains an amino acid sequence represented by SEQ. ID. No 2 at N-terminal.

3. The protein as set forth in claim 2, wherein the protein contains an amino acid sequence represented by SEQ. ID. No 7 or an amino acid sequence having over 70% sequence homology with the same.

4. The protein as set forth in claim 2 or claim 3, wherein the specific activity of the protein to phytate is over 1,500 units/mg.

5. The protein as set forth in claim 4, wherein the specific activity of the protein to phytate is over 3,000 units/mg.

6. A gene coding the protein of claim 3.

7. The gene as set forth in claim 6, wherein the gene has a base sequence represented by SEQ. ID. No 6 or a base sequence having over 70% sequence homology with the same.

8. A *Citrobacter braakii* YH-15 strain producing the protein of claim 1 (Accession No: KCCM 10427).

9. A feed additive containing the strain of claim 8 or the protein of claim 1 as an effective ingredient.